

Figure 1B

Figure 1.B

Figure 1C

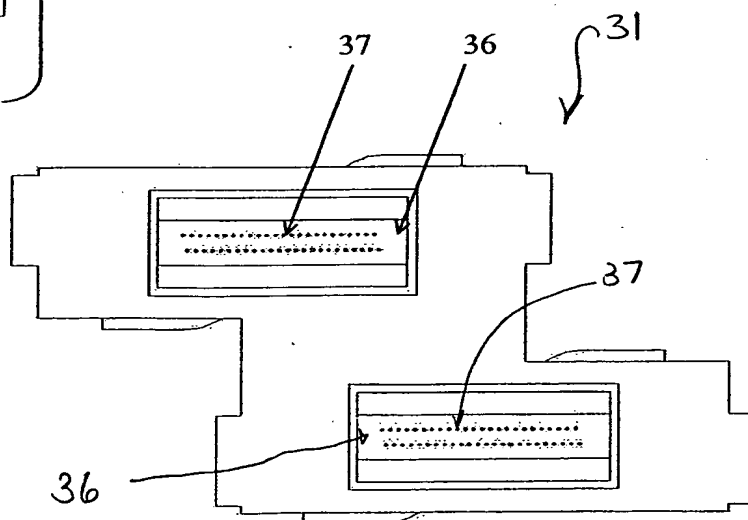


FIG. 2

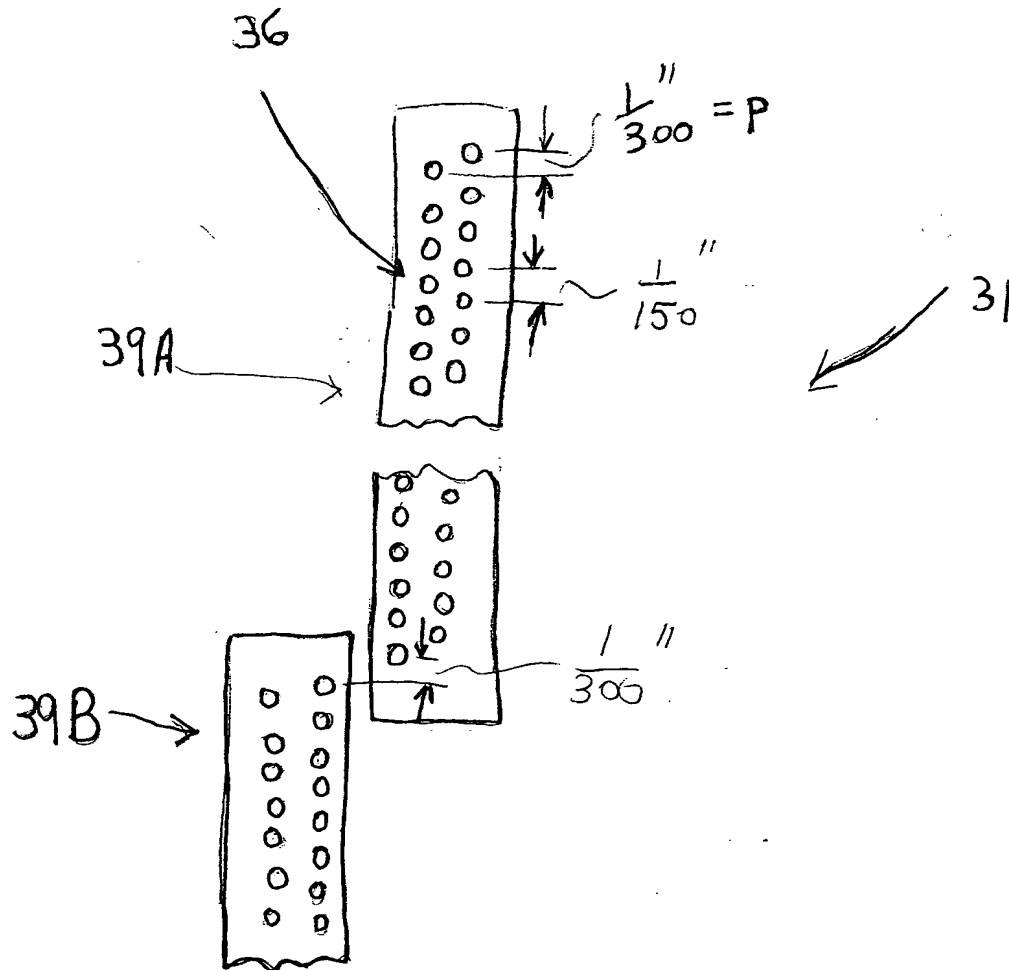


Fig- 2

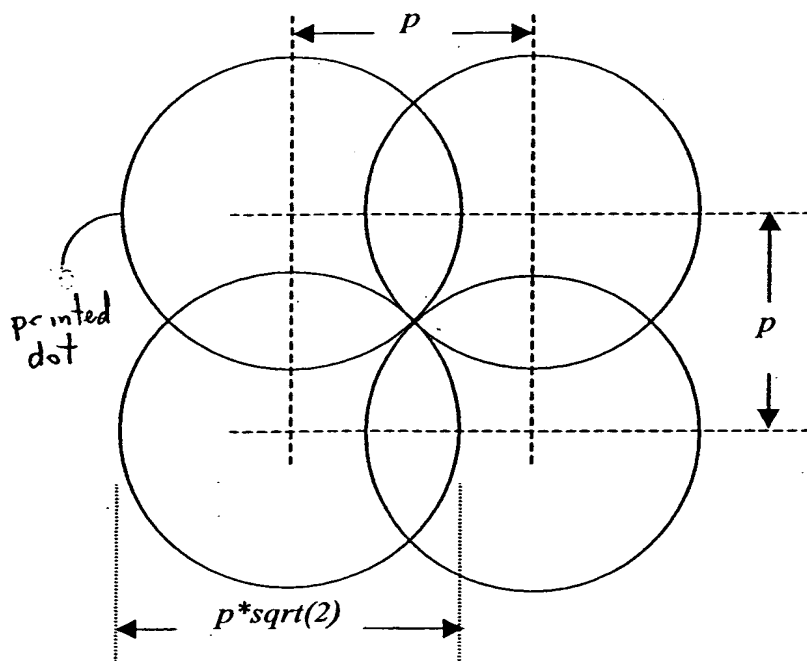


Figure 3

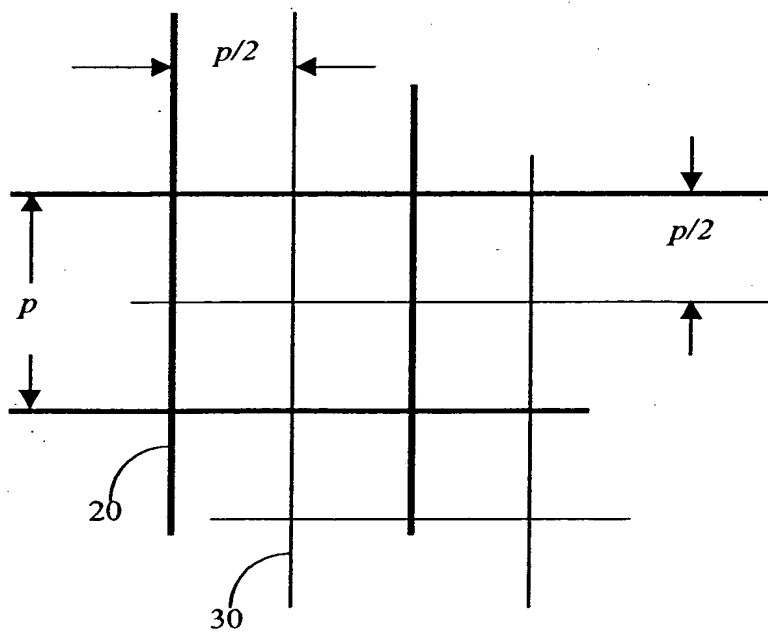


Figure 4

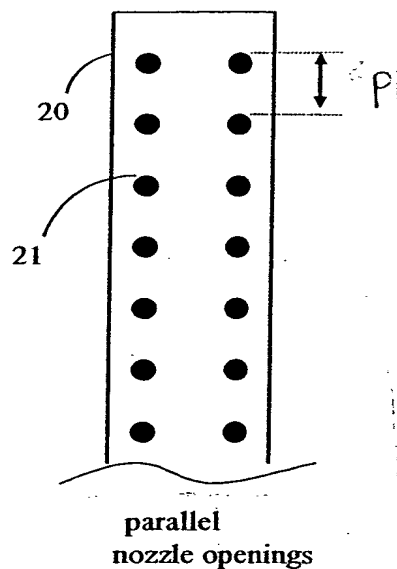
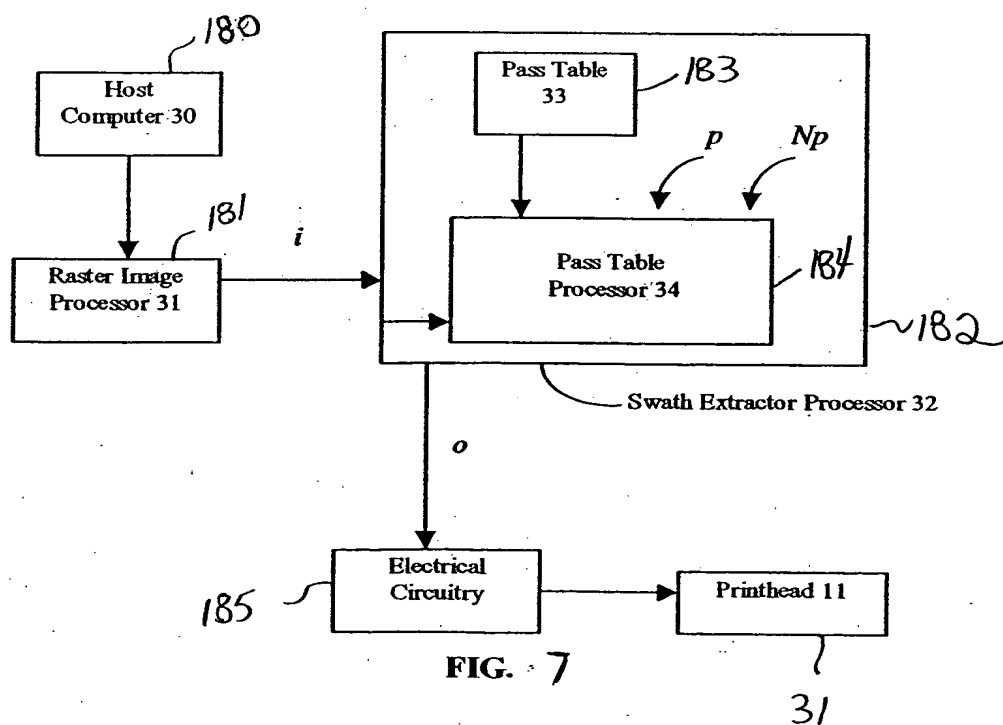
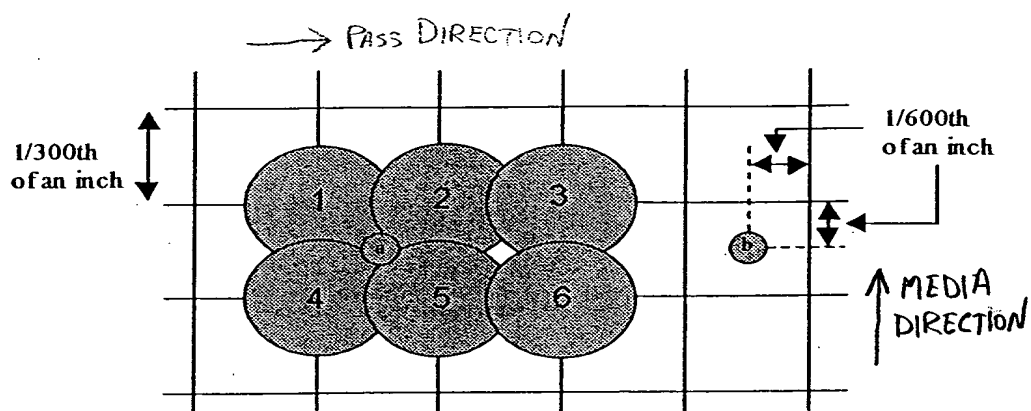


FIG. 5



[illegible]

Drops 1 to 6 are on the original raster, drops a & b are on the shifted raster.

Fig. 6

FIG. 8

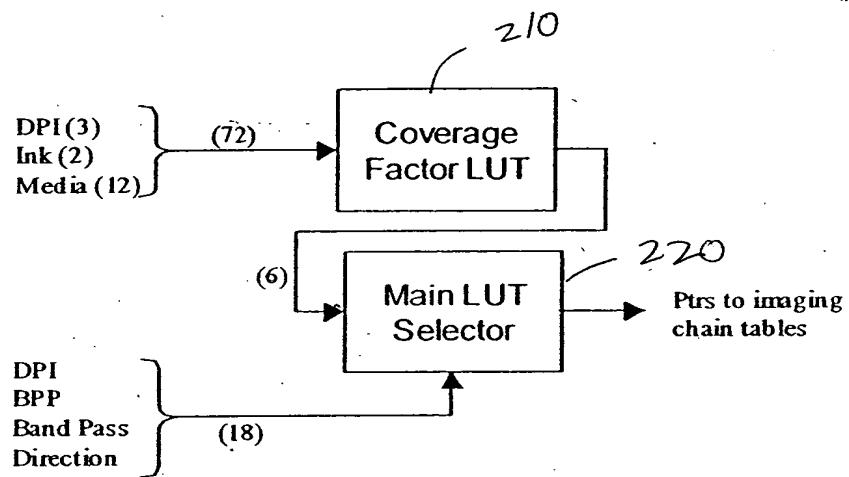


Fig. 8

The diagram illustrates a digital halftone processing system. It features three main input streams: **Multitone Pixel Address**, **Multitone Pixel Value**, and **ALR** (Analog Level Reference).

- The **Multitone Pixel Address** is split: one path goes to a **Pass Table Lut** (labeled 230), and the other goes to a **Print Masking** block (labeled 250).
- The **Multitone Pixel Value** is input to the **Pass Table Lut**.
- The **ALR** is input to a **Shifted Raster LUT** (labeled 240).
- The output of the **Shifted Raster LUT** is sent to **Paper Movement and Head Firing Control** and also to the **Print Masking** block.
- The output of the **Pass Table Lut** is sent to the **Print Masking** block.
- The **Print Masking** block (250) also receives **ARR, ASR** (Analog Raster Reference, Analog Sample Rate) signals.
- The output of the **Print Masking** block is sent to a **Drop Vol. Lut** (labeled 260).
- The output of the **Drop Vol. Lut** is sent to **Additional Print Engine Operations**.

Handwritten annotations include "230" for the Pass Table Lut, "250" for the Print Masking block, "260" for the Drop Vol. Lut, and "240" for the Shifted Raster LUT. The label "Fig. 9" is at the bottom center.

Fig. 9

300 dpi, 2-bit printing
with 2 banding passes

Reference Raster Pass Table

Multi-Tone Level	Drop Volume Index
0	A
1	C
2	E
3	F

Fig. 10(a)

Shifted Raster LUT

Print Pass	Shift Indicator
0	F
1	T
2	F
3	T

Fig. 10(c)

Shifted Raster Pass Table

Multi-Tone Level	Drop Volume Index
0	A
1	A
2	A
3	B

Fig. 10(b)

Print Mask

0	1
1	0

Fig. 10(d)

DROP VOLUME LUT

Drop Volume Index	Drop Volume
A	0
B	8 pl
C	16 pl
D	32 pl
E	48 pl
F	64 pl

Fig. 10(e)

402250 56404600

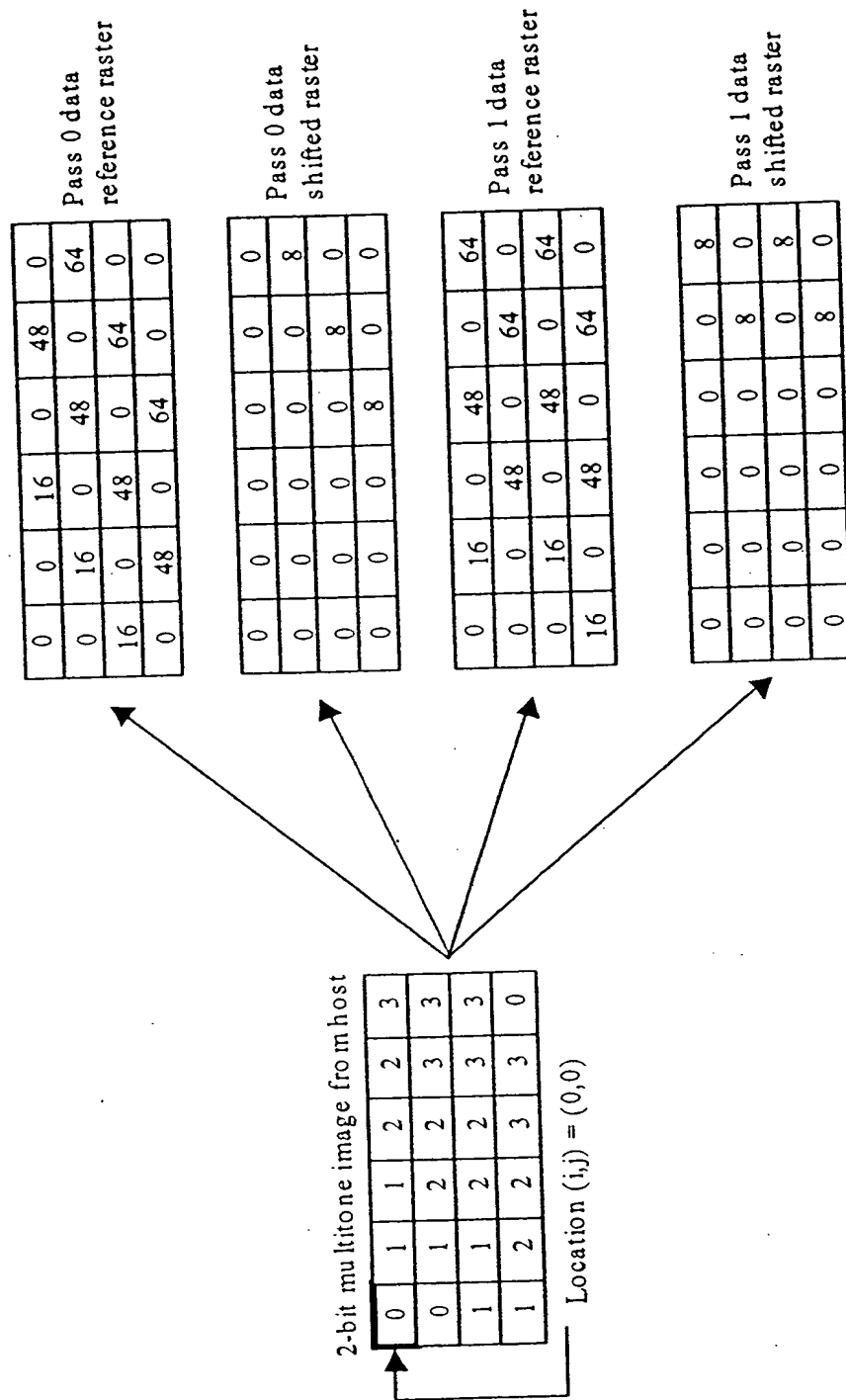


Figure 11

Example Print mode: 300 dpi, 4 bits/pix, 4 banding passes

Ink Volumes: 0,8,16,24,32,40,48,56,64,72,80

Reference Raster Pass Table

Multi-Tone Level	Drop Volume Index
0	A
1	B
2	C
3	C
4	D
5	D
6	E
7	E
8	F
9	F
10	F
11	A
12	A
13	A
14	A
15	A

Fig. 12(a)

Shifted Raster LUT

Print Pass	Shift Indicator
0	F
1	T
2	F
3	T
4	F
5	T
6	F
7	T

Fig. 12(c)

Print Mask

0	1	0	1
1	0	1	0
0	1	0	1
1	0	1	0

Fig. 12(d)

Drop Volume LUT

Drop Volume Index	Drop Volume
A	0
B	8 pl
C	16 pl
D	32 pl
E	48 pl
F	64 pl

Fig. 12(e)

Shifted Raster Pass Table

Multi-Tone Level	Drop Volume Index
0	A
1	A
2	A
3	B
4	A
5	B
6	A
7	B
8	A
9	B
10	C
11	A
12	A
13	A
14	A
15	A

Fig. 12(b)

Example Print mode: 300 dpi, 4 bits/pix, 2 banding passes

Ink Volumes: 0,8,16,32,48,64,72

Reference Raster Pass Table

Multi-Tone Level	Drop Volume Index
0	A
1	B
2	C
3	D
4	E
5	F
6	F
7	A
8	A
9	A
10	A
11	A
12	A
13	A
14	A
15	A

Fig. 13(a)

Shifted Raster LUT

Print Pass	Shift Indicator
0	F
1	T
2	F
3	T

Fig. 13(c)

Print Mask

0	1
1	0

Fig. 13(d)

Drop Volume LUT

Drop Volume Index	Drop Volume
A	0
B	8 pl
C	16 pl
D	32 pl
E	48 pl
F	64 pl

Fig. 13(e)

Shifted Raster Pass Table

Multi-Tone Level	Drop Volume Index
0	A
1	A
2	A
3	A
4	A
5	A
6	B
7	A
8	A
9	A
10	A
11	A
12	A
13	A
14	A
15	A

Fig. 13(b)